



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/396.238

09/15/99

NAKAZAWA

Y

JG-NG-4893

EXAMINER

MMCI/1113

JULES E GOLDBERG ESQ

MCAULAY FISHER NISSEN

GOLDBERG & KIEL LLP

261 MADISON AVENUE

NEW YORK NY 10016-2391

FUNK, S

ART UNIT

PAPER NUMBER

2854

DATE MAILED:

11/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/396,238

Applicant(s)
Nakazawa et al.

Examiner
Stephen R. Funk

Group Art Unit
2854



- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-17 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-17 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

The specification is replete with grammatical errors too numerous to mention specifically. The specification should be revised carefully. Examples of such errors are: On page 18 line 11 "Peltie" should be --Peltier--, on page 21 line 21 and several times thereafter "22" should be --22b--, on page 22 line 22 "protrusions" should be --protrudes--, on page 48 line 24 "stared" should be --stored--, on page 52 line 15 "anged" has no clear meaning, on page 54 line 19 "Isoper" is misspelled and should presumably have all letters capitalized as being a trademark, and on page 56 line 15 "contract" should be --contact--.

The use of the trademark TEFLON has been noted in this application on page 57 line 9. All letters of the trademark must be capitalized wherever it appears and be accompanied by the generic terminology. Applicant should carefully review the specification for any additional trademarks.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claims 1 - 17 are objected to under 37 C.F.R. 1.75(a) as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 line 6 --the-- should be inserted before "image" to accurately reflect that it has been previously recited.

In claim 2 lines 3 - 4 "ordinary" temperature is vague and indefinite in that it cannot be accurately determined what would, and would not, be considered "ordinary".

In each of claims 4 - 6 "drawing of images" and "drawing images" should be --the

forming of images-- so to refer back and have consistent terminology with that recited in claim 1 line 2.

In claim 5 line 2 "the rotation" lacks proper antecedent basis.

In claims 7, 10, and 11 "said (and "the") ink jet recording device" lacks proper antecedent basis. Note that claim 7 depends directly from claim 5, not claim 6. In line 3 "the almost same length" is grammatically awkward and "the width" lacks proper antecedent basis (and would appear to be more accurately referred to as the "length" of the cylinder).

In each of claims 9 and 11 "the ink circulation" lacks proper antecedent basis.

In each of claims 15 and 17 "the head" lacks proper antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 5 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. (JP 10-204,355) in view of Love, III (US 4,718,340). Kato et al. teach the method as recited with exception of imaging the printing plate in press. Note, for example, the English Abstract and Figures 1 - 3 of Kato et al. Love teaches the desirability of imaging a printing plate in press. See columns 2 and 3, the paragraph bridging columns 11 and 12, and column 21 lines 13 - 37 of Love, for example. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al. with the step of imaging the plate in press in view of Love to achieve the many benefits of directly imaging the plate in press. With respect to claim 7 it would have been obvious to one of ordinary skill in the art to provide the method of Kato et al. with a full line head as disclosed by Love to achieve faster imaging of the plate.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Love as applied to claims 1, 2, and 5 - 7 above, and further in view of Adler (EP 641 648). Neither Kato et al. or Love disclose a device for fixing the image on the plate. However, see column 8 lines 23 - 25 of Love for fixable ink compositions. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al., as modified by Love, with the step of fixing the image on the plate in view of Adler et al. so as to increase the durability of the ink deposited on the plate.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Love as applied to claims 1, 2, and 5 - 7 above, and further in view of Masaaki (JP 58-147,373). Masaaki teaches the conventionality of a means for removing dust from a recording

medium before imaging. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al., as modified by Love, with the step of removing dust before imaging in view of Masaaki so as to prevent dust from interfering with the deposition of ink onto the plate.

Claims 8 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Love as applied to claims 1, 2, and 5 - 7 above, and further in view of Arway et al. (US 4,555,712). Arway et al. teach the conventionality of a means (22) for supplying ink, means (26) for recovering ink, means (40) for controlling the temperature of ink, and means (44) for controlling a concentration of ink for an ink jet print head. See Figure 1 of Arway et al., for example. Arway et al. does not teach means for stirring ink inside the ink tank but such is widely conventional in the art. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al., as modified by Love, with various means for controlling the ink inside the tank in view of Arway et al. so as to provide ink to the head in an optimum condition.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Love as applied to claims 1, 2, and 5 - 7 above, and further in view of Ikkatai (US 5,363,132). Ikkatai teaches the desirability of means for moving the head near or away from a recording medium. See columns 1 and 2 of Ikkatai, for example. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al., as modified by Love, with the step of moving the head near or away in view of Ikkatai so as to protect the head from contaminants when not imaging.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Love as applied to claims 1, 2, and 5 - 7 above, and further in view of Gasparrini (US 5,322,015). Gasparrini teaches the desirability of removing dust during printing. See the paragraph bridging columns 5 and 6 of Gasparrini, for example. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al., as modified by Love, with the step of removing dust during printing in view of Gasparrini so as to reduce contamination of the printing cylinders.

Claims 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Love as applied to claims 1, 2, and 5 - 7 above, and further in view of Miura et al. (US 5,988,782). Miura et al. teach the conventionality of stirring the ink within a tank and cleaning the ink jet head. See the Abstract and column 17 line 1 of Miura et al., for example. It would have been obvious to one of ordinary skill in the art to provide the method of Kato et al., as modified by Love, with a means for stirring the ink and means for cleaning the head in view of Miura et al. so as to provide a consistent ink composition to the head and remove contaminants from the head.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Funk whose telephone number is (703) 308-0982. The examiner can normally be reached on Monday - Thursday from 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

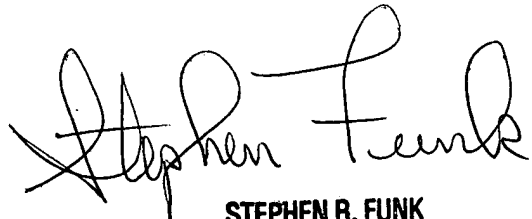
Serial No. 09/396,238
Art Unit 2854

-7-

supervisor, John Hilten, can be reached at (703) 308-0719. The fax number for incoming official papers is (703) 308-7722, 7724. The fax number for informal papers in Art Unit 2854 is (703) 308-5841.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Stephen Funk
November 8, 2000



STEPHEN R. FUNK
PRIMARY EXAMINER